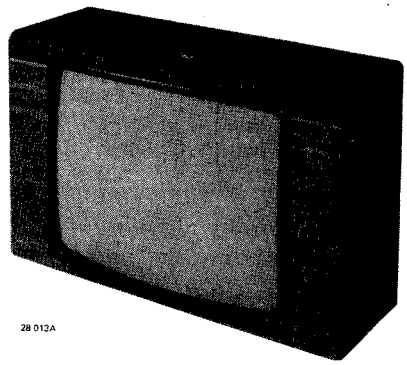
Colour television

26CS4385/02Z/22Z

26CS4393/02R/02Z/22Z

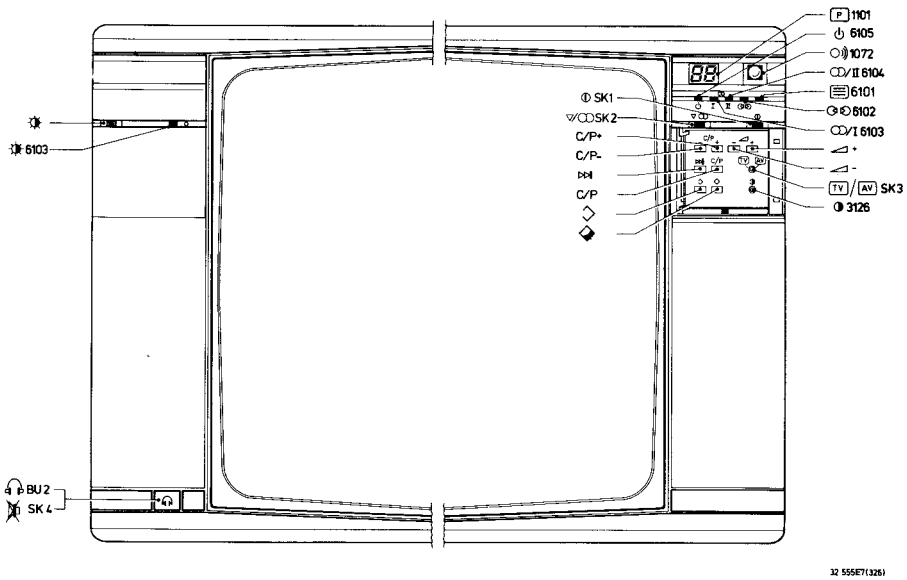
Service
Service
Service

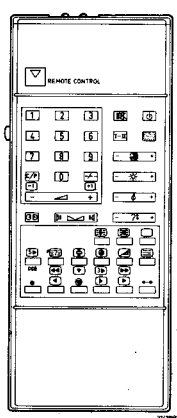


Service Manual

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified, be used.

SYSTEM 4
CHASSIS K40





RC5370

25P

220-240 V (± 10%)
90 W

75 Ω coax.

A66-540X

4 Ω/2x 10 W
STEREO

6.3mm

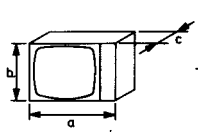
180°

8-1000 Ω

max. 2 V

AV

IN/OUT



axbxc
781x511x448 mm

UV414	UV418
VHFa : 44 - 88 MHz	47 - 111 MHz
VHFb : 162 - 230 MHz	111 - 293 MHz
UHF : 470 - 860 MHz	470 - 860 MHz

Documentation Technique Service Dokumentation Documentazione di Servizio Huolte-Ohje Manual de Servicio Manual de Serviço

Subject to modification

4822 727 14522

Printed in The Netherlands

PHILIPS

1001
SUPPLY PANEL
PANNELLO ALIMENTAZIONE

DEGAUSSING
SMAGNETIZZAZIONE

1042
SCART
PANEL

1058
SPATIAL
PANEL

1053
STEREO
AMPL.

1061
HEADPHONE
PANEL
PANNELLO
CUFFA

1028
INTERFACE
INTERFACCIA

1027
STEREO DECOD.

1021
CONTROL MODULE
MODULO DI CONTROLLO

1091
A.P.C. PANEL

1081
I.R-TRANSMITTER
TRANSMETTITORE IR.

1072
IR. RECEIVER
RICEVITORE IR

1071+1073
OPERATING PANEL
PANNELLO OPERATIVO

SMALL SIGNAL PANEL
PANNELLO SEGNALI DEBOLI

1101
R-G-B PANEL
PANNELLO R-V-B

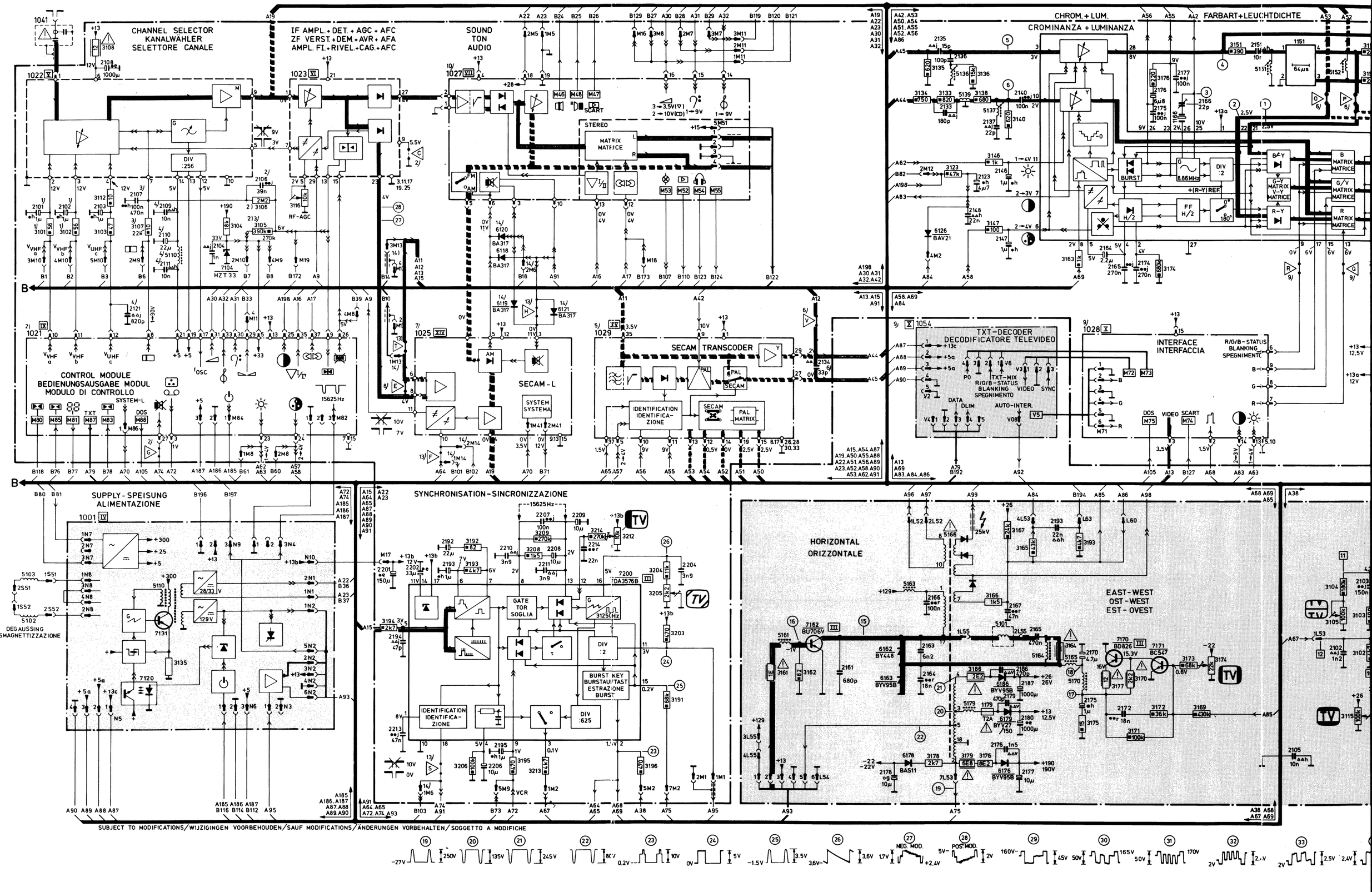
LARGE SIGNAL PANEL
PANNELLO SEGNALI FORTI

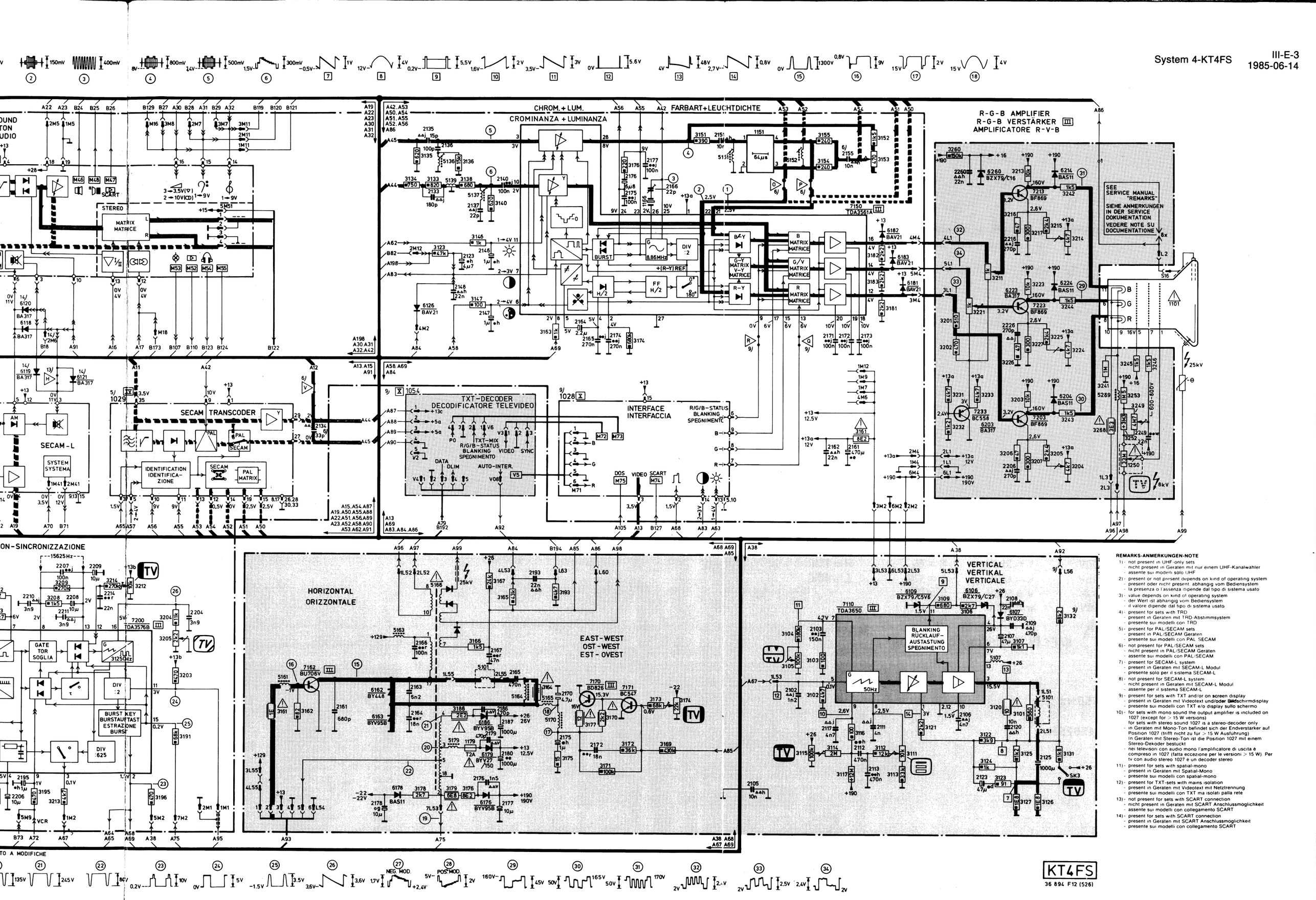
5101
DEFLECTION
DEFLESSIONE

32 529 E12

Description Umschreibung	Pos	26CS4385/02 26CS4393/02	26CS4385/22 26CS4393/22
		See chapter/paragraph of basic manual SYSTEM 4 Siehe Kapitel/Paragraph der Grunddokumentation für SYSTEM 4	
General Allgemein		I-A/B/C	I-A/B/C
Mechanical instructions Mechanische Hinweise		II-D	II-D
Electrical instructions Elektrische Hinweise		II-C	II-C
Chassis data Chassis-Daten		III-B	III-B
Supply panel Speisungspaneel	1001	IV-B	IV-B
Supply panel Speisungspaneel	1055	—	—
Tuner Kanalwähler	1022	V-A (UV414) (UV418)	V-A (UV414) (UV418)
IF module ZF-Modul	1023	VI-B	VI-B
Sound module Ton-Modul	1027	VII-B	VII-B
Sound module Ton-Modul	1053	VIII-A	VIII-A
Control module Bedienungs-Modul	1021	IX-A	IX-A
Interface module Interface-Modul	1028	X-A	X-A
Decoder panel Dekoderpaneel	1054	—	—
RC transmitter Fernbedienungssender	1081	XII-G (RC5370)	XII-G (RC5370)
Repair method Reparaturmethode		XIII-A/D/E	XIII-A/D/E
System module System-Modul	1025	—	—
System module System-Modul	1029	—	XV-A
Spatial panel Spatial Paneel	1058	XVI-A	XVI-A
SCART panel SCART Paneel	1042	XVI-B/C	XVI-B/C
Suitable for the reception of system Geeignet für den Empfang des Systems		PAL B-G-H	PAL B-G-H SECAM B-G-H

DIAGRAM-SCHALTBILD-SCHEMA A





REMARKS-ANMERKUNGEN-NOTE

1) - not present in UHF-only sets
   - nicht present in Geräten mit nur einem UHF-Kanalwähler
   - assente sui modelli solo UHF
2) - present or not present depends on kind of operating system
   - present oder nicht present: abhängig vom Bediensystem
   - la presenza o l'assenza dipende dal tipo di sistema usato
3) - value depends on kind of operating system
   - der Wert ist abhangig vom Bediensystem
   - il valore dipende dal tipo di sistema usato
4) - present for sets with TRD
   - present in Geräten mit TRD-Abstimmsystem
   - presente sui modelli con TRD
5) - present for PAL/SECAM sets
   - present in PAL/SECAM Geräten
   - presente sui modelli con PAL SECAM
6) - not present for PAL/SECAM sets
   - nicht present in PAL/SECAM Geräten
   - assente sui modelli con PAL/SECAM
7) - present for SECAM-L system
   - present in Geräten mit SECAM-L Modul
   - presente solo per il sistema SECAM-L
8) - not present for SECAM-L system
   - nicht present in Geräten mit SECAM-L Modul
   - assente per il sistema SECAM-L
9) - present for sets with TXT and/or on screen display
   - present in Geräten mit Videotext und/oder Bildschirmdisplay
   - presente sui modelli con TXT e/o display sullo schermo
10) - for sets with mono sound the output amplifier is included on 1027 (except for > 15 W versions)
    for sets with stereo sound 1027 is a stereo-decoder only
    in Geräten mit Mono-Ton befindet sich der Endverstärker auf Position 1027 (trifft nicht zu für > 15 W Ausführung)
    In Geräten mit Stereo-Ton ist die Position 1027 mit einem Stereo-Dekoder bestuckt
    nei televisori con audio mono l'amplificatore di uscita è compreso in 1027 (fatta eccezione per le versioni > 15 W). Per tv con audio stereo 1027 è un decoder stereo
11) - present for sets with spatial-mono
    - present in Geräten mit Spatial-Mono
    - presente sui modelli con spatial-mono
12) - present for TXT-sets with mains isolation
    - present in Geräten mit Videotext mit Netztrennung
    - presente sui modelli con TXT ma isolati dalla rete
13) - not present for sets with SCART connection
    - nicht present in Geräten mit SCART Anschlussmoglichkeit
    - assente sui modelli con collegamento SCART
14) - present for sets with SCART connection
    - present in Geräten mit SCART Anschlussmoglichkeit
    - presente sui modelli con collegamento SCART

SYMBOL	TYPE	P t amb 70°	TOLERANCE	SERIES	RANGE 2322...
	SFR16	0.2	10Ω – 1M 5%	E24	180
	SFR25	0.33	1Ω – 10M 5%	E24	181
	SFR30	0.5	1Ω – 10M 5%	E24	182
	CR52	0.67	1Ω – 1M 5%	E24	213
	MR25	0.4	1Ω – 1M 1% (2%)	E24	151
	MR30	0.5	1Ω – 1M 1% (2%)	E24	152
	VR37	0.5	220k – 33M 5%	E24	242
	VR68	1	100k – 68M 5%	E24	244

SYMBOL	TYPE	VOLTAGE DC	TOLERANCE	RANGE 2222...
	POLYESTER FLATFOIL	SEE NOTE	10%	342 ÷ 352 365 ÷ 368
	PLATE CERAMIC	SEE NOTE	DEPENDING ON CAPACITY	629 ÷ 683
	ELCO MINIATURE SINGLE	SEE NOTE	−10+50%	015 ÷ 033 041 ÷ 043
	ELCO SINGLE ENDED	SEE NOTE	± 20%	035

NOTE :

*

	f = 25V	q = 200V	x = 1000V	E = 20V
	g = 40V	r = 250V	z = 1600V	F = 35V
a = 2.5V	h = 63V	s = 300V	A = 1.6V	G = 50V
b = 4V	j = 100V	t = 350V	B = 6V	H = 75V
c = 6.3V	l = 125V	u = 400V	C = 12V	I = 80V
d = 10V	m = 150V	v = 500V	D = 15V	
e = 16V	n = 160V	w = 630V		

SAFETY RESISTOR/CAPACITOR

34 498 A12

AC 50 Hz

DC 15625 Hz

E B C

BC328-40
BC337
BC547
BC548
BC557
BC558
BF324

B C E

BF 422

B E C

BF 240
BF 494

E C B

BU508
BU706
BU826

E C B

BUX 84

B C E

BD676
BD234

E C B

BD 826
BF 869

ELECTRICAL PARTS ON SMALL SIGNAL PANEL

2110	22 µF- 35 V	4822 124 40434
2164	2.2 µF- 50 V	4822 122 31942
2166	20 pF-trimm.	4822 125 50045
2176	6.8 µF- 25 V	4822 122 31941
2192	22 µF- 35 V	4822 124 40434
2204	3.9 nF-160 V	5322 121 54127
2206	10 µF- 50 V	4822 124 40435
2208	10 µF- 16 V	4822 122 31939
2209	10 µF- 50 V	4822 124 40435

BA317		4822 130 30847
BAV21		4822 130 30842

3104	18 kΩ-2.5 W	
3108	12 Ω-0.33 W	
3116	10 kΩ-trimm.	
3153	470 Ω-trimm.	
3161	8.2 Ω-0.33 W	
3205	2.2 kΩ-trimm.	
3212	10 kΩ-trimm.	

TDA3561A
TDA3576B
HZT33

ELECTRICAL PARTS ON LARGE SIGNAL PANEL

2107	47 µF- 25 V	5322 124 40642
2125	1000 µF- 35 V	4822 124 21216
2161	680 pF-2000 V	4822 122 32061
2163	6.2 nF-2000 V	4822 121 42383
2165	470 nF- 250 V	4822 121 42376
2170	4.7 µF- 50 V	4822 124 21208
2177	10 µF- 250 V	4822 124 21135
2187	1000 µF- 35 V	4822 124 21216

5161		4822 156 10769
5164		4822 156 21332
5165		4822 158 10553
5166		4822 140 10271
5170		4822 156 21293
5269		4822 156 21258

3105	100 kΩ-trimm.	
3107	680 Ω- 1.6 W	
3111	10 kΩ-trimm.	
3114	2 MΩ-0.33 W	
3115	100 kΩ-trimm.	
3161	1 Ω-3.5 W	
3164	1 kΩ	
3166	1.5 kΩ- 0.5 W	
3170	2.2 kΩ-0.33 W	
3174	22 kΩ- 1.6 W	
3176	8.2 Ω- 1.6 W	
3177	12 Ω-0.33 W	
3178	2.7 kΩ- 1.6 W	
3179	6.8 Ω-0.33 W	
3186	1.8 Ω-0.33 W	

BC547
BD826
BU706V

ELECTRICAL PARTS ON PICTURE TUBE PANEL

3203	10 kΩ-7 W	4822 113 80213
3204	4.7 kΩ-trimm.	4822 101 10349
3211	1 kΩ-trimm.	4822 100 10504
3213	10 kΩ-7 W	4822 113 80213
3214	4.7 kΩ-trimm.	4822 101 10349
3221	1 kΩ-trimm.	4822 100 10504
3223	10 kΩ-7 W	4822 113 80213
3224	4.7 kΩ-trimm.	4822 101 10349
3241	1 MΩ-0.5 W	4822 116 52493
3242	1.5 kΩ-0.5 W	4822 110 53112
3243	1.5 kΩ-0.5 W	4822 110 53112
3244	1.5 kΩ-0.5 W	4822 110 53112
3245	1.5 kΩ-0.5 W	4822 110 53112
3246	1.5 kΩ-0.5 W	4822 110 53112
3249	4.7 MΩ-trimm.	4822 100 10586
3253	1.6 MΩ-0.33 W	4822 116 52946
3268	3.3 Ω-3.5 W	4822 113 80238

BC558
BF369

BAS11

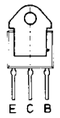
VARIOUS

1250	Focus potmeter
	Focus cable long
	Focus cable short
	Socket picture tube

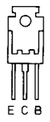
BC328-40
BC337
BC547
BC548
BC557
BC558
BF324

BF 422

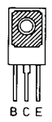
BF 240
BF 494



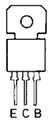
BU508
BU706
BU826



BUX 84



BD676
BD234



BD 826
BF 869

ELECTRICAL PARTS ON SMALL SIGNAL PANEL

2110	22 µF- 35 V	4822 124 40434
2164	2.2 µF- 50 V	4822 122 31942
2166	20 pF-trimm.	4822 125 50045
2176	6.8 µF- 25 V	4822 122 31941
2192	22 µF- 35 V	4822 124 40434
2204	3.9 nF-160 V	5322 121 54127
2206	10 µF- 50 V	4822 124 40435
2208	10 µF- 16 V	4822 122 31939
2209	10 µF- 50 V	4822 124 40435

BA317		4822 130 30847
BAV21		4822 130 30842

3104	18 kΩ-2.5 W	4822 116 51091
3108	12 Ω-0.33 W	4822 111 30511
3116	10 kΩ-trimm.	4822 101 10351
3153	470 Ω-trimm.	4822 100 10038
3161	8.2 Ω-0.33 W	4822 111 30506
3205	2.2 kΩ-trimm.	4822 101 10348
3212	10 kΩ-trimm.	4822 101 10351

TDA3561A		4822 209 81239
TDA3576B		4822 209 81506
HZT33		4822 130 30959

5110		4822 157 50961
5136		4822 156 20966
5137		4822 156 21113
5139	Delay line	4822 157 51056
5151		4822 156 21027
5152		4822 156 21025

VARIOUS

1151	Delay line	4822 320 40096
1166	Crystal 8.867 MHz	4822 242 70626

15 pin	Module connector	4822 267 20216
19 pin	Module connector	4822 267 60082
27pin	Module connector	4822 267 60105

ELECTRICAL PARTS ON LARGE SIGNAL PANEL

2107	47 µF- 25 V	5322 124 40642
2125	1000 µF- 35 V	4822 124 21216
2161	680 pF-2000 V	4822 122 32061
2163	6.2 nF-2000 V	4822 121 42383
2165	470 nF- 250 V	4822 121 42376
2170	4.7 µF- 50 V	4822 124 21208
2177	10 µF- 250 V	4822 124 21135
2187	1000 µF- 35 V	4822 124 21216

5161		4822 156 10769
5164		4822 156 21332
5165		4822 158 10553
5166		4822 140 10271
5170		4822 156 21293
5269		4822 156 21258

3105	100 kΩ-trimm.	4822 101 10352
3107	680 Ω- 1.6 W	4822 116 51162
3111	10 kΩ-trimm.	4822 101 10351
3114	2 MΩ-0.33 W	5322 116 60135
3115	100 kΩ-trimm.	4822 101 10352
3161	1 Ω-3.5 W	4822 113 80245
3164	1 kΩ	5322 116 54909
3166	1.5 kΩ- 0.5 W	4822 110 53112
3170	2.2 kΩ-0.33 W	4822 111 30569
3174	22 kΩ- 1.6 W	4822 100 10051
3176	8.2 Ω- 1.6 W	4822 116 51878
3177	12 Ω-0.33 W	4822 111 30511
3178	2.7 kΩ- 1.6 W	4822 116 51133
3179	6.8 Ω-0.33 W	4822 111 30504
3186	1.8 Ω-0.33 W	4822 111 30489

BC547		4822 130 44257
BD826		4822 130 41774
BU706V		4822 130 42553

BAS11		4822 130 41273
BAX14		4822 130 34193
BY448		5322 130 31559
BYD33D		4822 130 42488
BYV27-150		4822 130 31628
BYV95B		4822 130 41486
BZX79/C5V6		4822 130 34173
BZX79/C16		4822 130 34268
BZX79/C27		4822 130 34379
OF449		4822 130 30983

TDA3650		4822 209 81121

VARIOUS

SK3		4822 273 30206
EHT-cable		4822 320 20095
Fuse holder		4822 492 60063
Insulator for BU706V		4822 466 91487
Spring for BD826		4822 492 62077
Spring for BU706V/TDA3650		4822 492 62076
1179 2 Amp. T (glass type)		4822 253 30025
1179 2 Amp. T (plastic type)		4822 253 10039

ELECTRICAL PARTS ON PICTURE TUBE PANEL

3203	10 kΩ-7 W	4822 113 80213
3204	4.7 kΩ-trimm.	4822 101 10349
3211	1 kΩ-trimm.	4822 100 10504
3213	10 kΩ-7 W	4822 113 80213
3214	4.7 kΩ-trimm.	4822 101 10349
3221	1 kΩ-trimm.	4822 100 10504
3223	10 kΩ-7 W	4822 113 80213
3224	4.7 kΩ-trimm.	4822 101 10349
3241	1 MΩ-0.5 W	4822 116 52493
3242	1.5 kΩ-0.5 W	4822 110 53112
3243	1.5 kΩ-0.5 W	4822 110 53112
3244	1.5 kΩ-0.5 W	4822 110 53112
3245	1.5 kΩ-0.5 W	4822 110 53112
3246	1.5 kΩ-0.5 W	4822 110 53112
3249	4.7 MΩ-trimm.	4822 100 10586
3253	1.6 MΩ-0.33 W	4822 116 52946
3268	3.3 Ω-3.5 W	4822 113 80238

BC558		4822 130 40941
BF869		4822 130 41773

BAS11		4822 130 41273

VARIOUS

1250	Focus potmeter	4822 101 20814
	Focus cable long	4822 320 20126
	Focus cable short	4822 320 20109
	Socket picture tube	4822 255 70216

SMALL SIGNAL PANEL

PICTURE TUBE PANEL

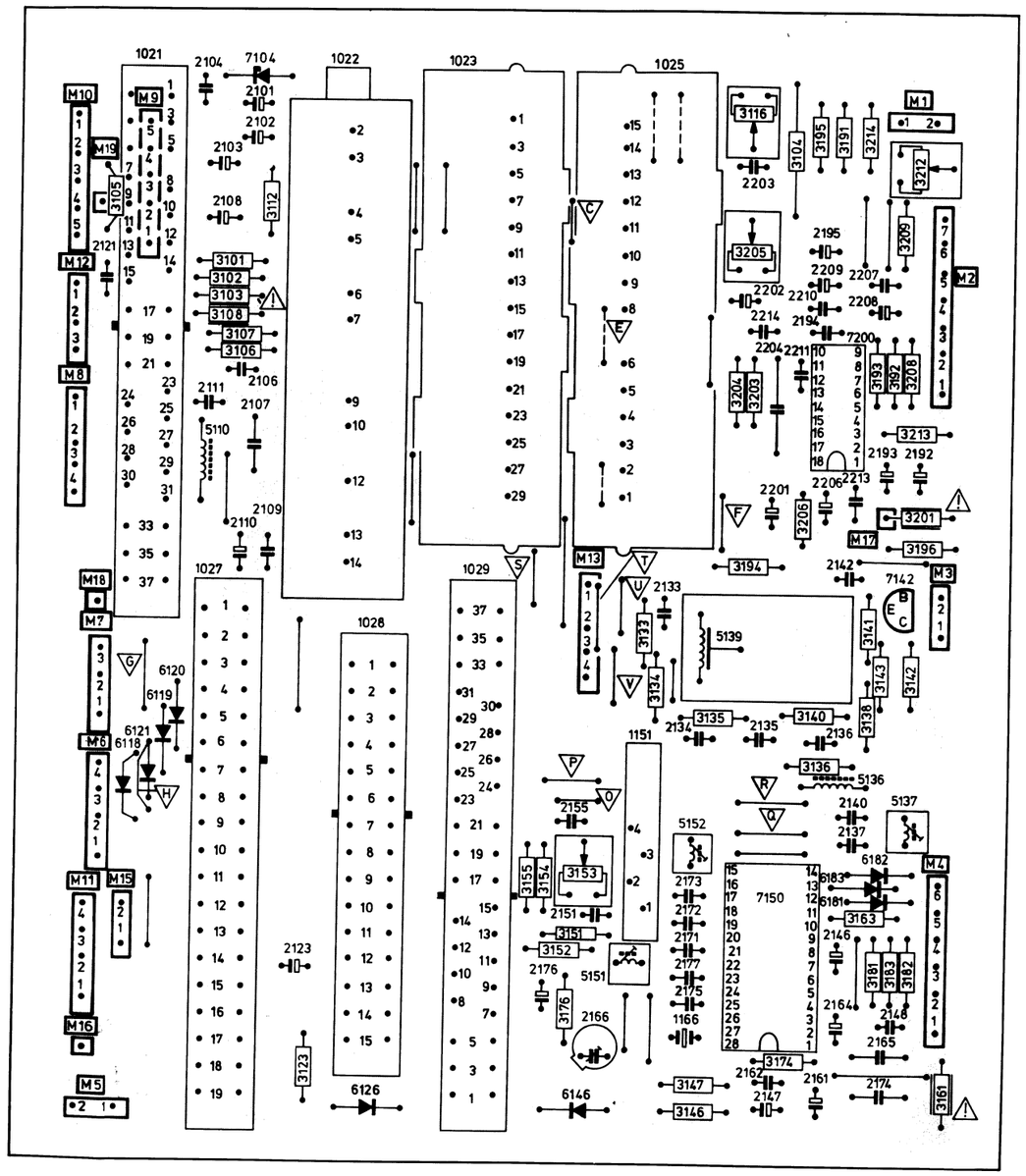
LARGE SIGNAL PANEL

7110
2 = 0V 1 = 3,2V
4 = 26V 3 = 14,7V
6 = 17,5V 5 = 0,1V
8 = 2,5V 7 = 4,7V
10 = 1,5V 9 = 1,8V
12 = 0V 11 = 1,2V
13 = 26V

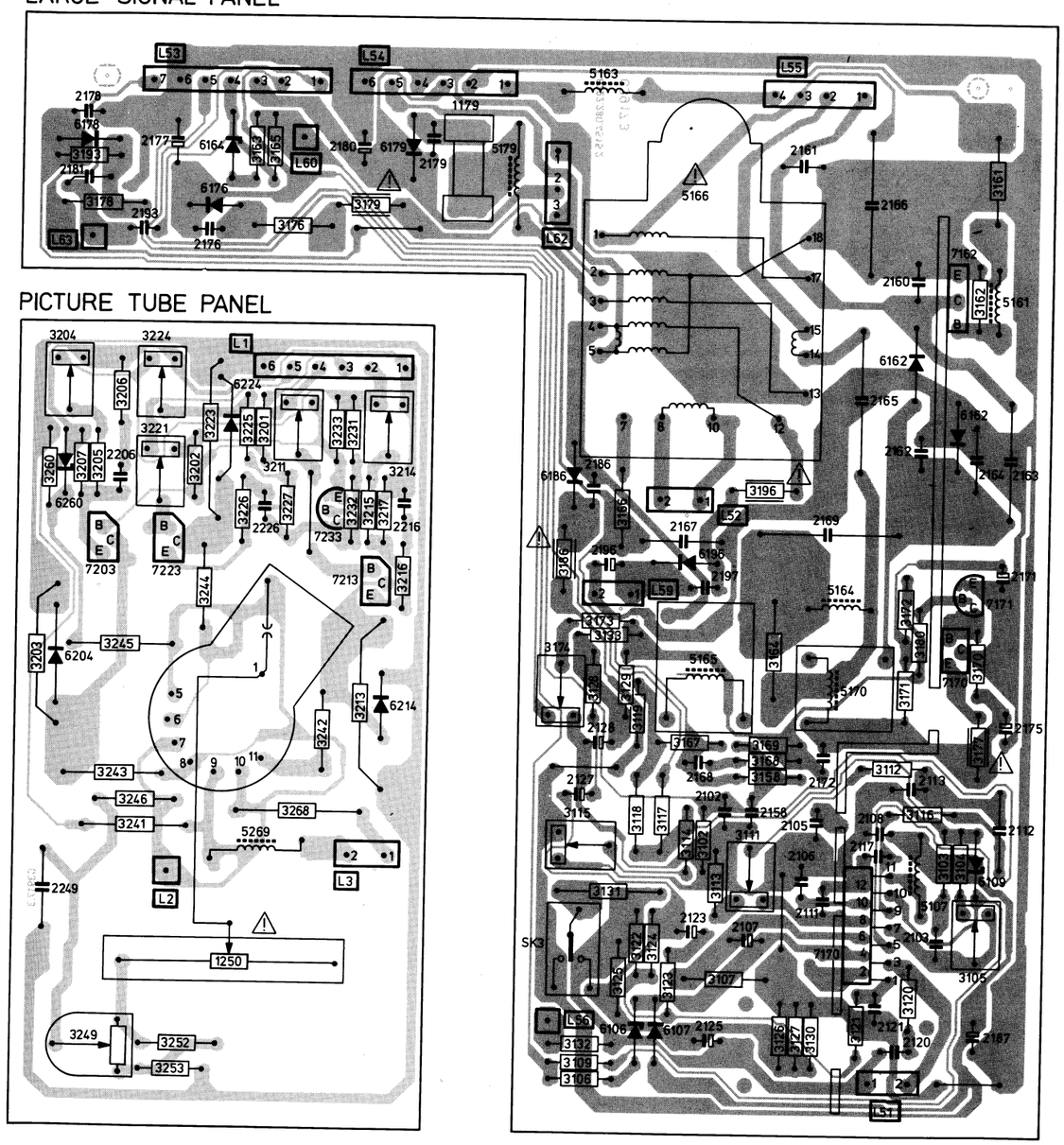
37 525 E12

CS 101 440

SMALL SIGNAL PANEL



LARGE SIGNAL PANEL



PICTURE TUBE PANEL

37 524 E12

System 4-KT4FS

III-E-1
1985-06-14

SMALL SIGNAL PANEL

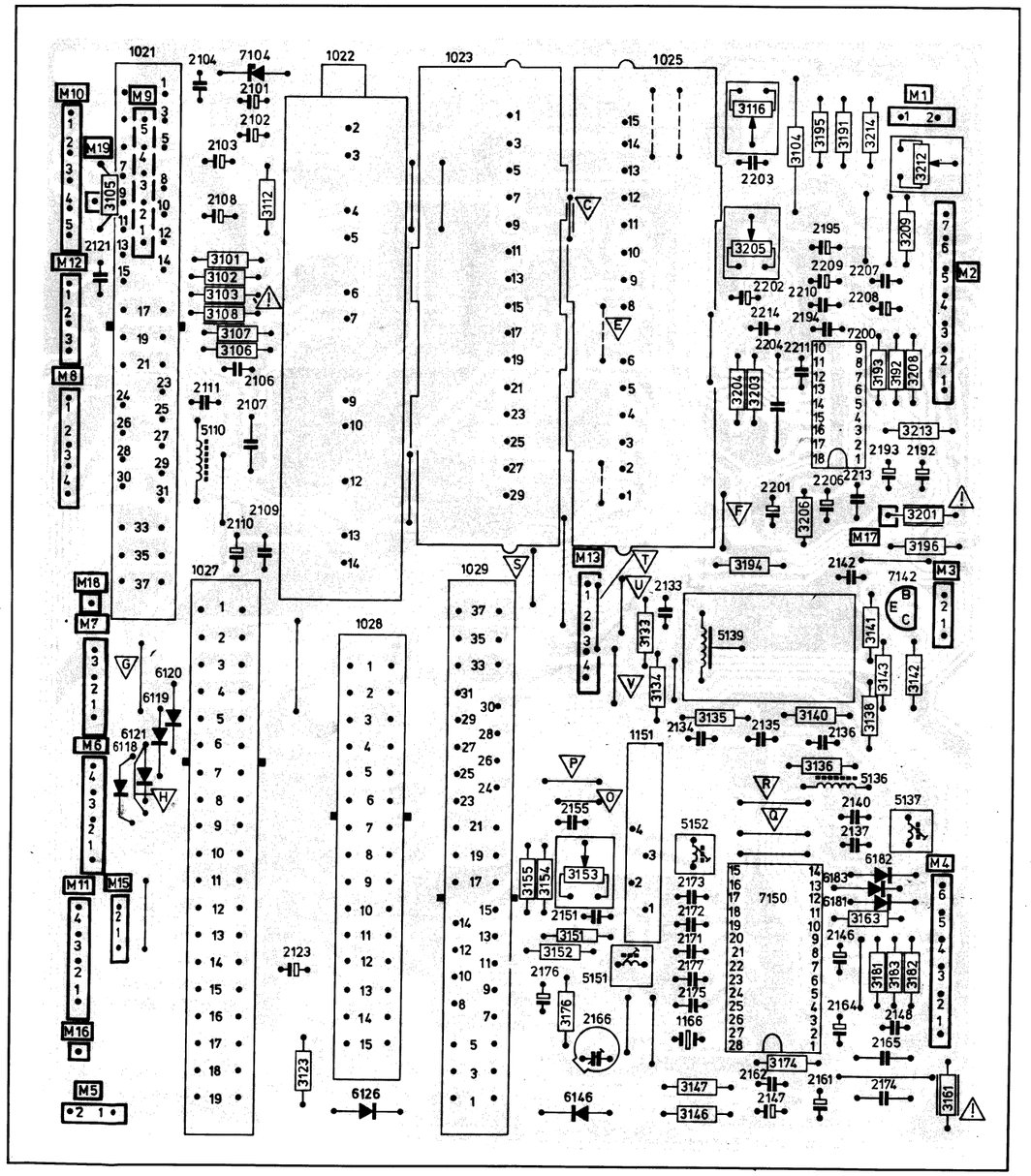
PICTURE TUBE PANEL

LARGE SIGNAL PANEL

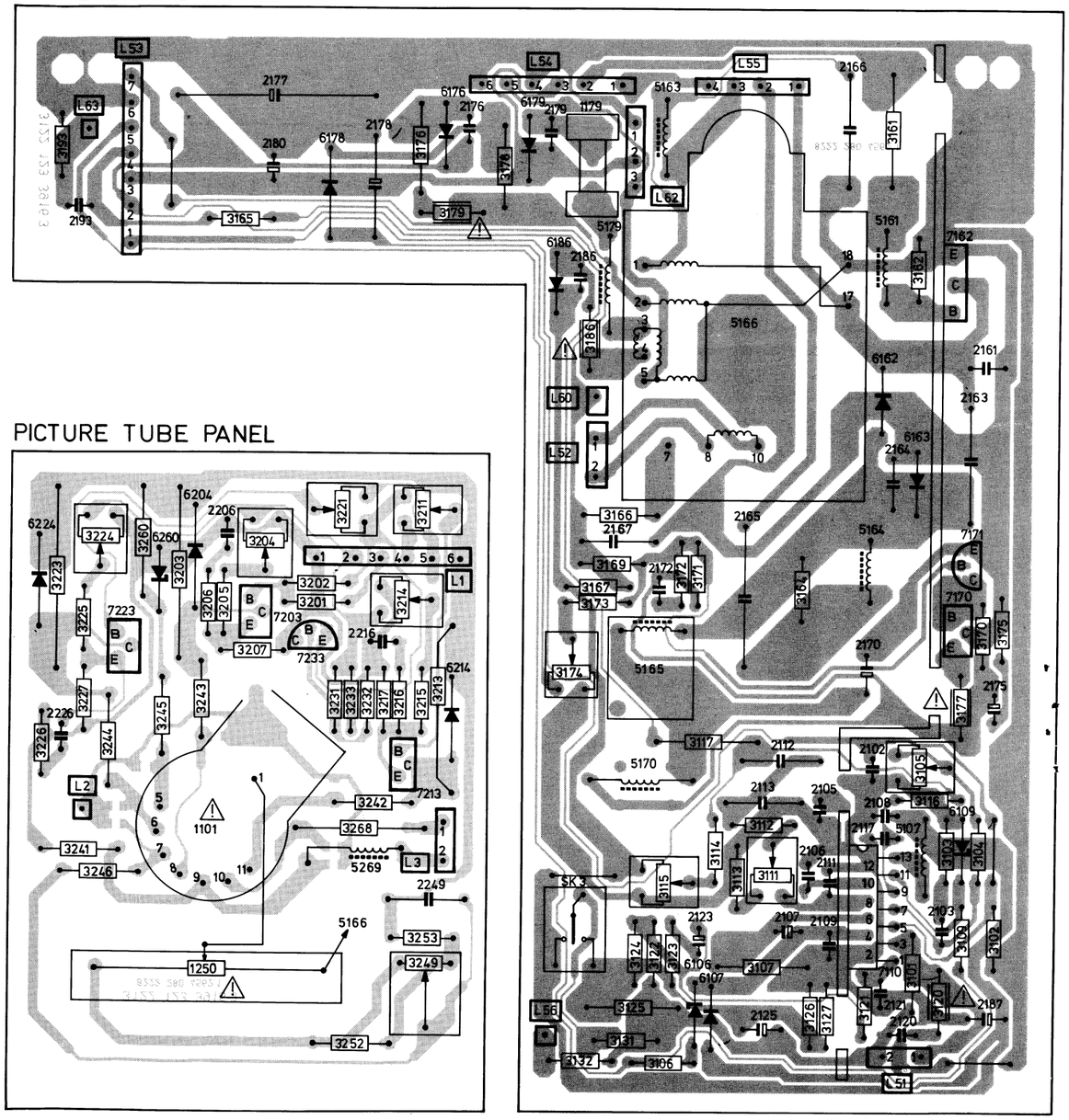
37 210 E12

CS 101 436

SMALL SIGNAL PANEL



LARGE SIGNAL PANEL

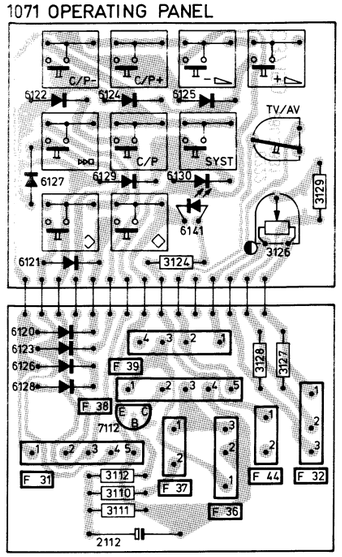


PICTURE TUBE PANEL

37 209 E12

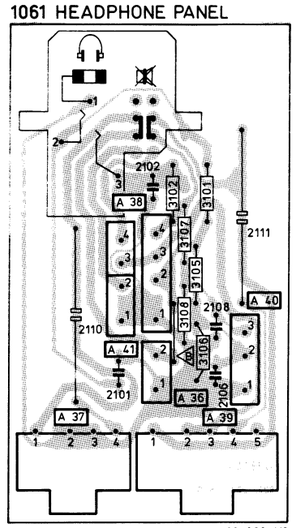
CS 101 437

1071 OPERATING PANEL



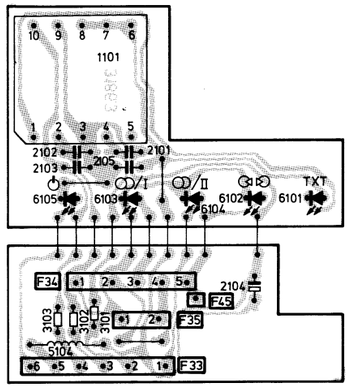
32 032 B12

1061 HEADPHONE PANEL



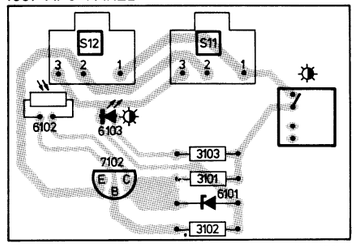
32 030 A12

1073 DISPLAY PANEL



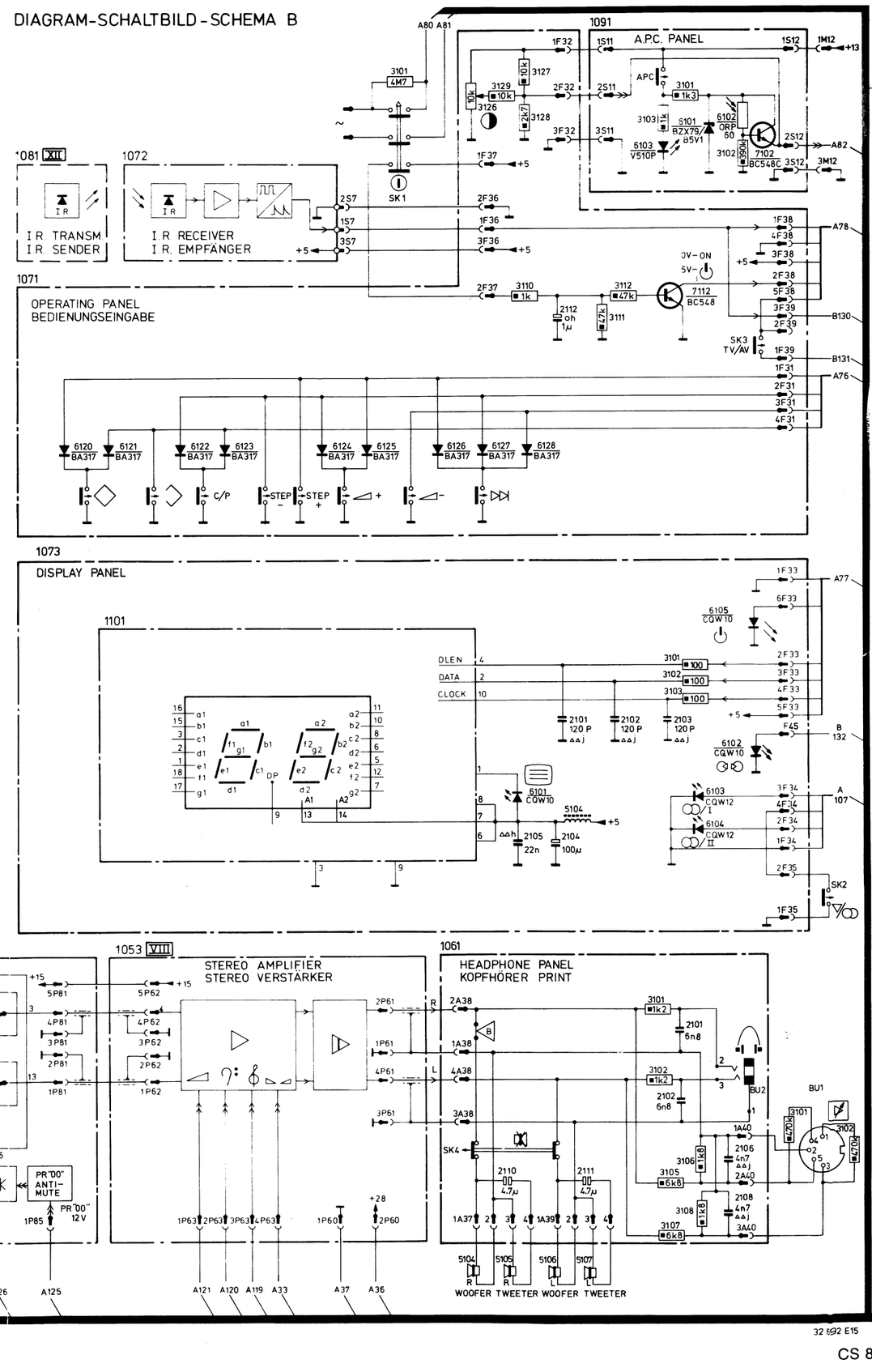
32 502 A21

1091 APC PANEL



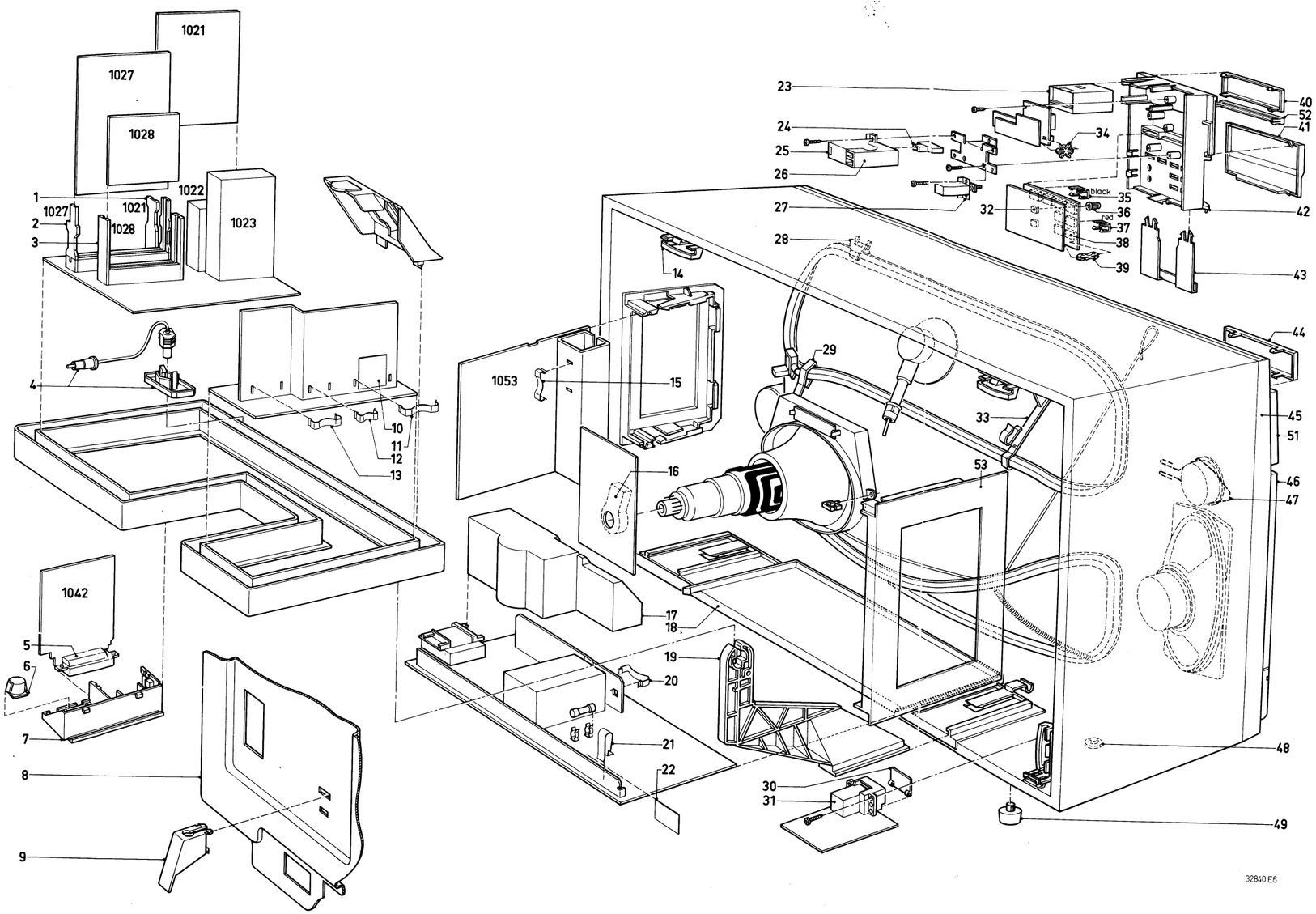
32 556A7

DIAGRAM-SCHALTBILD-SCHEMA B



32 692 E15

CS 89 472



Pos.	Code number	Description
1	4822 267 60105	Module connector
2	4822 267 60082	Module connector
3	4822 267 20216	Module connector
4	4822 218 20304	Aerial unit
5	4822 267 10094	SCART connector
6	4822 267 40201	Socket BU1
7	4822 256 90512	Holder SCART-panel
8	4822 438 40069	Rear panel
9	4822 404 30381	Hook on rear panel
10	4822 255 40134	Isolation plate
11	4822 492 62076	Spring fixing BU508
12	4822 492 62077	Spring fixing BD234
13	4822 492 62076	Spring fixing TDA3650
14	4822 404 30415	Block fixing rear panel
15	4822 492 62076	Spring fixing IC
16	4822 255 10181	Valve holder
17	4822 462 40592	Protecting cap
18	4822 435 60045	Frame fixing supply panel
19	4822 404 30587	Support for chassis
20	4822 492 62076	Spring fixing BU826
21	4822 492 62907	Spring fixing D6154
22	4822 255 40134	Isolation plate
23	4822 212 21449	Remote control receiver
24	4822 410 10066	Knob for SK1 and SK2
25	4822 276 10781	Mains switch SK1
26	4822 432 10224	Cap on mains switch
27	4822 276 11105	Mono/stereo switch
28	4822 404 30235	Clip fixing degaussing coils
29	4822 401 10642	Strip fixing degaussing coils
30	4822 432 91182	Cover for headphone
31	4822 267 30351	Headphone socket
32	4822 273 40305	TV/AV switch
33	4822 404 30236	Strip fixing degaussing coils
34	4822 401 10644	Distance piece
35	4822 411 60771	Knob-black
36	4822 413 31192	Knob (for 26CS4385)
36	4822 413 10176	Knob (for 26CS4393)
37	4822 411 60772	Knob-red
38	4822 276 10799	Switch
39	4822 401 10751	Distance piece
40	4822 459 20238	Cover for display (for 26CS4385)
40	4822 459 20229	Cover for display (for 26CS4393)
41	4822 432 91226	Door (for 26CS4385)
41	4822 432 91331	Door (for 26CS4393/02R)
41	4822 432 91329	Door (for 26CS4393/02Z/22Z)
42	4822 459 60808	Front panel (for 26CS4385)
42	4822 459 60743	Front panel (for 26CS4393)
43	4822 417 10708	Hinge (for 26CS4385)
43	4822 417 10703	Hinge (for 26CS4393)
44	4822 459 20238	Cover (for 26CS4385)
44	4822 459 20231	Cover (for 26CS4393)
45	4822 451 80722	Mask (for 26CS4385)
45	4822 451 80718	Mask (for 26CS4393/02R)
45	4822 451 80717	Mask (for 26CS4393/02Z/22Z)
46	4822 458 10379	Loudspeaker grill (for 26CS4385)
46	4822 458 30345	Loudspeaker grill (for 26CS4393/02R)
46	4822 458 30344	Loudspeaker grill (for 26CS4393/02Z/22Z)
47	4822 492 40767	Spring fixing tweeter (for 26CS4385)
47	4822 492 62659	Spring fixing tweeter (for 26CS4393)
48	4822 505 10705	Plastic nut
49	4822 462 10119	Table protector
51	4822 432 10436	Front panel (for 26CS4385)
52	4822 459 20236	Cover for led's (for 26CS4385)
53	4822 464 70268	Holder TXT decoder

OPERATING PANEL - 1071

Switch	4822 273 40305	TV/AV SK3
3126	4822 100 10327	10 kΩ preset
BA317	4822 130 30847	
BC548	4822 130 40938	

DISPLAY PANEL 1073

1101	4822 212 21165	Display assy
2101	4822 122 31348	120 pF - 100 V
2102	4822 122 31348	120 pF - 100 V
2103	4822 122 31348	120 pF - 100 V
2104	4822 124 40178	100 µF - 10 V
5104	4822 158 10545	Coil 12 µH
CQW10	4822 130 31512	Red
CQW12	4822 130 31513	Yellow

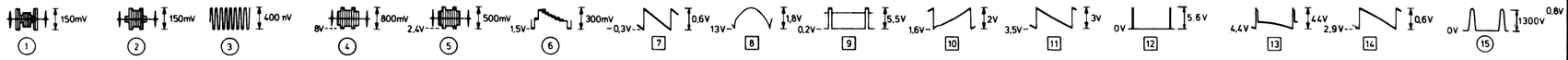
VARIOUS PARTS

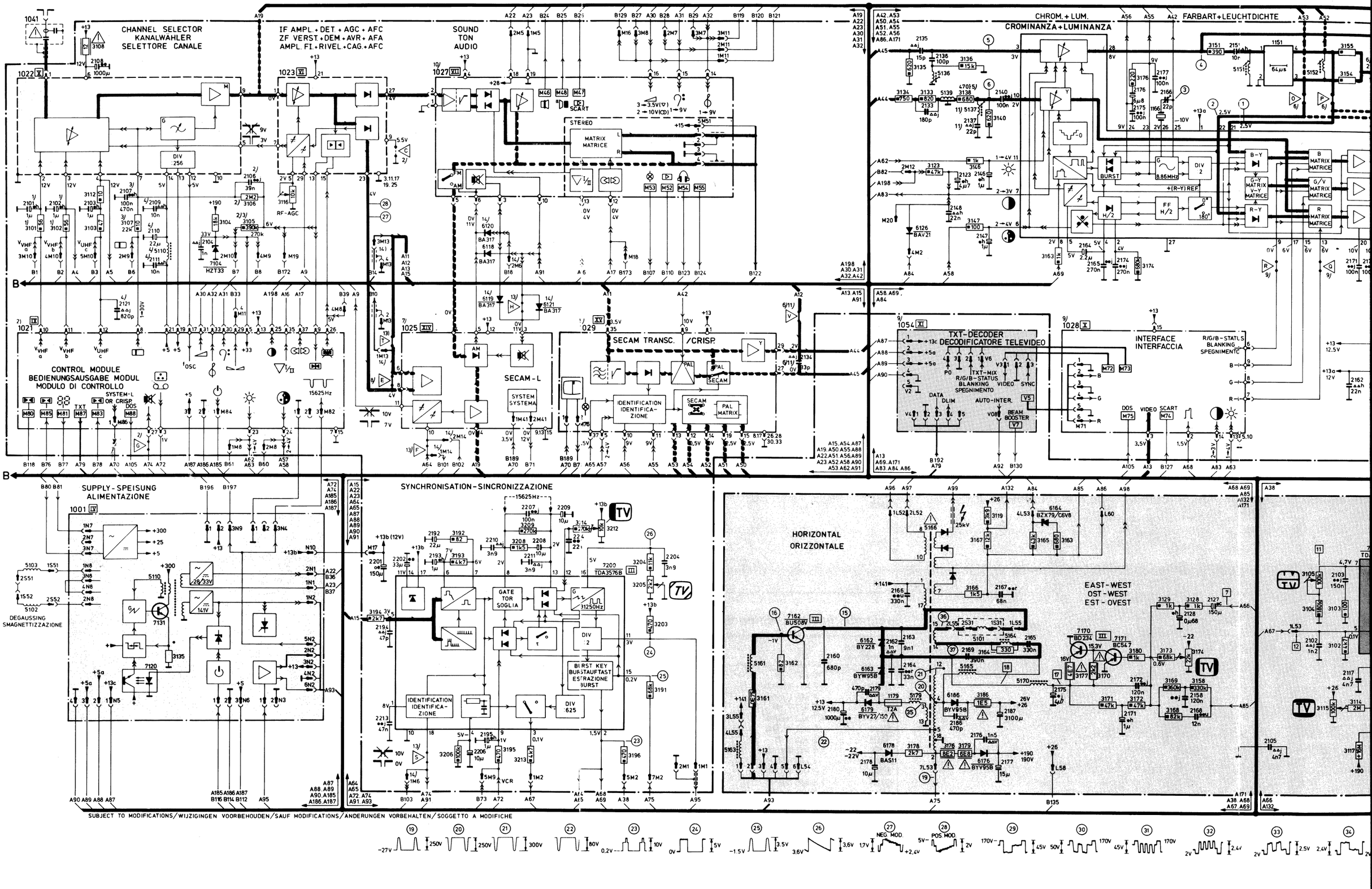
2 pin socket	4822 265 20172	
3 pin socket	4822 265 30121	
4 pin socket	4822 265 30119	
5 pin socket	4822 267 40247	
6 pin socket	4822 265 30117	
2 pin plug	4822 266 20073	
3 pin plug	4822 266 30071	
4 pin plug	4822 266 30072	
5 pin plug	4822 266 30075	
6 pin plug	4822 266 30073	
1041	4822 218 20304	Aerial unit
1072	4822 212 21449	Remote receiver
1081	4822 218 20313	RC5370
5101	4822 150 10168	Deflection
5102	4822 157 51645	Degaussing
5103	4822 157 51645	Degaussing
5104	4822 240 50216	Loudspeaker (AD38902/P4M)
5105	4822 240 70101	Loudspeaker (AD20310/T4)
5106	4822 240 50216	Loudspeaker (AD38902/P4M)
5107	4822 240 70101	Loudspeaker (AD20310/T4)

APC PANEL 1091

Switch	4822 276 11086	
Knob	4822 410 23182	
BZX79/B5V1	4822 130 34233	
ORP60 LDR	5322 116 10009	
V510P Red	4822 130 31594	

DIAGRAM-SCHALTBILD-SCHEMA A





SOUND
TON
AUDIO

STEREO
MATRIX
MATRICE

SECAM-L
SECAM TRANSC. /CRISP.
SYSTEM
SYSTEMA
IDENTIFICATION
IDENTIFICA-
ZIONE
SECAM
PAL
MATRIX

CHROM. + LUM.
CROMINANZA + LUMINANZA
FARBART + LEUCHTDICHTE
BURST
DIV 2
FF H/2
B-Y
G-Y MATRIX V-Y MATRIX
R-Y
B MATRIX MATRICE
G/V MATRIX MATRICE
R MATRIX MATRICE
+(R-Y) REF

TXT-DECODER
DECODIFICATORE TELEVIDEO
TXT-MIX
R/G/B-STATUS
BLANKING
SPEGNIMENTO
AUTO-INTER.
BEAM BOOSTER

INTERFACE
INTERFACCIA
R/G/B-STATUS
BLANKING
SPEGNIMENTO
DOS
VIDEO
SCART

R-G-B AMPLIFIER
R-G-B VERSTÄRKER III
AMPLIFICATORE R-V-B
SEE SERVICE MANUAL "REMARKS"
SIEHE ANMERKUNGEN IN DER SERVICE DOKUMENTATION
VEDERE NOTE SU DOCUMENTATIONE

HORIZONTAL
ORIZZONTALE
EAST-WEST
OST-WEST
EST-OVEST
VERTICAL
VERTIKAL
VERTICALE
BLANKING
RÜCKLAUF-
AUSTASTUNG
SPEGNIMENTO

ISATION - SINCRONIZZAZIONE
GATE
TOR
SOGLIA
BURST KEY
BURSTAUFTAST
ESTRAZIONE
BURST

OGGETTO A MODIFICHE

REMARKS-ANMERKUNGEN-NOTE

1)- not present in UHF-only sets
- nicht present in Geräten mit nur einem UHF-Kanalwähler
- assente sui modelli solo UHF

2)- present or not present depends on kind of operating system
- present oder nicht present, abhängig vom Bediensystem
- la presenza o l'assenza dipende dal tipo di sistema usato

3)- value depends on kind of operating system
- der Wert ist abhängig vom Bediensystem
- il valore dipende dal tipo di sistema usato

4)- present for sets with TRD
- present in Geräten mit TRD-Abstimmsystem
- presente sui modelli con TRD

5)- present for PAL/SECAM or crispening sets
- present in PAL/SECAM Geräten oder mit Versteilerung
- presente sui modelli con PAL/SECAM o con crispening

6)- not present for PAL/SECAM sets
- nicht present in PAL/SECAM Geräten
- assente sui modelli con PAL/SECAM

7)- present for SECAM-L system
- present in Geräten mit SECAM-L Modul
- presente solo per il sistema SECAM-L

8)- not present for SECAM-L system
- nicht present in Geräten mit SECAM-L Modul
- assente per il sistema SECAM-L

9)- present for sets with TXT and/or on screen display
- present in Geräten mit Videotext und/oder Bildschirmdisplay
- presente sui modelli con TXT e/o display sullo schermo

10)- for sets with mono sound the output amplifier is included on 1027 (except for > 15 W versions)
for sets with stereo sound 1027 is a stereo-decoder only
- in Geräten mit Mono-Ton befindet sich der Endverstärker auf Position 1027 (trifft nicht zu für > 15 W Ausführung)
In Geräten mit Stereo-Ton ist die Position 1027 mit einem Stereo-Dekoder bestuckt
- nei televisori con audio mono l'amplificatore di uscita è compreso in 1027 (fatta eccezione per le versioni > 15 W). Per tv con audio stereo 1027 è un decoder stereo

11)- not present for crispening sets
- nicht present in Geräten mit Versteilerung
- assente sui modelli con crispening

12)- present for TXT-sets with mains isolation
- present in Geräten mit Videotext mit Netztrennung
- presente sui modelli con TXT ma isolati palla rete

13)- not present for sets with SCART connection
- nicht present in Geräten mit SCART Anschlussmöglichkeit
- assente sui modelli con collegamento SCART

14)- present for sets with SCART connection
- present in Geräten mit SCART Anschlussmöglichkeit
- presente sui modelli con collegamento SCART

K40FS

36 798 F7 (526)

SYMBOL	TYPE	P t amb 70°	TOLERANCE	SERIES	RANGE 2322...
	SFR16	0.2	10Ω – 1M 5%	E24	180
	SFR25	0.33	1Ω – 10M 5%	E24	181
	SFR30	0.5	1Ω – 10M 5%	E24	182
	CR52	0.67	1Ω – 1M 5%	E24	213
	MR25	0.4	1Ω – 1M 1% (2%)	E24	151
	MR30	0.5	1Ω – 1M 1% (2%)	E24	152
	VR37	0.5	220k – 33M 5%	E24	242
	VR68	1	100k – 68M 5%	E24	244

SYMBOL	TYPE	VOLTAGE DC	TOLERANCE	RANGE 2222...
●●*	POLYESTER FLATFOIL	SEE NOTE	10%	342 ÷ 352 365 ÷ 368
△△*	PLATE CERAMIC	SEE NOTE	DEPENDING ON CAPACITY	629 ÷ 683
o*	ELCO MINIATURE SINGLE	SEE NOTE	−10+50%	015 ÷ 033 041 ÷ 043
•*	ELCO SINGLE ENDED	SEE NOTE	± 20%	035

NOTE :

*

a = 2.5V	f = 25V	q = 200V	x = 1000V	E = 20V
b = 4V	g = 40V	r = 250V	z = 1600V	F = 35V
c = 6.3V	h = 63V	s = 300V	A = 1.6V	G = 50V
d = 10V	j = 100V	t = 350V	B = 6V	H = 75V
e = 16V	l = 125V	u = 400V	C = 12V	I = 80V
	m = 150V	v = 500V	D = 15V	
	n = 160V	w = 630V		

SAFETY RESISTOR/CAPACITOR

34 498 A12

AC 50 Hz

DC 15625 Hz

E B C

BC328-40
BC337
BC547
BC548
BC557
BC558
BF324

B C E

BF 422

B E C

BF 240
BF 494

E C B

BU508
BU706
BU826

E C B

BUX 84

B C E

BD676
BD234

E C B

BD 826
BF 869

ELECTRICAL PARTS ON SMALL SIGNAL PANEL

2110	22 µF- 35 V	4822 124 40434
2164	2.2 µF- 50 V	4822 122 31942
2166	20 pF-trimm.	4822 125 50045
2176	6.8 µF- 25 V	4822 122 31941
2192	22 µF- 35 V	4822 124 40434
2204	3.9 nF-160 V	5322 121 54127
2206	10 µF- 50 V	4822 124 40435
2208	10 µF- 16 V	4822 122 31939
2209	10 µF- 50 V	4822 124 40435

BA317		4822 130 30847
BAV21		4822 130 30842

3104	18 kΩ-2.5 W	
3108	12 Ω-0,33 W	
3116	10 kΩ-trimm.	
3153	470 Ω-trimm.	
3161	8.2 Ω-0.33 W	
3205	2.2 kΩ-trimm.	
3212	10 kΩ-trimm.	

TDA3561A
TDA3576B
HZT3

ELECTRICAL PARTS ON LARGE SIGNAL PANEL

2107	100 µF- 50 V	4822 124 21348
2125	3100 µF- 30 V	4822 124 21347
2160	680 pF-2000 V	4822 122 32061
2163	9.1 nF-2000 V	4822 121 41784
2165	330 nF- 250 V	4822 121 42365
2169	390 nF- 250 V	4822 121 40479
2172	120 nF- 100 V	4822 121 42328
2177	15 µF- 350 V	4822 124 21654
2178	10 µF- 50 V	4822 124 40435
2187	3100 µF- 30 V	4822 124 21347

5107		4822 157 50963
5120		4822 157 50882
5164		4822 156 21157
5165		4822 157 52159
5166		4822 140 10269
5170		4822 158 10728
5269		4822 156 21258

3105	100 kΩ-trimm.	
3107	680 Ω- 1.6 W	
3111	10 kΩ-trimm.	
3114	2 MΩ-0.33 W	
3115	100 kΩ-trimm.	
3125	680 Ω- 1.6 W	
3131	1 kΩ- 1.6 W	
3161	0.75 Ω- 4 W	
3164	330 Ω- 2.5 W	
3166	1.5 kΩ- 0.5 W	
3170	2.2 kΩ-0.33 W	
3174	22 kΩ-trimm.	
3176	8.2 Ω- 1.6 W	
3178	2.7 kΩ- 1.6 W	
3179	6.8 Ω-0.33 W	
3186	1.5 Ω-0.33 W	

BC547
BD234
BU508V

ELECTRICAL PARTS ON PICTURE TUBE PANEL

3202	10 kΩ-7 W	4822 113 80213
3204	4.7 kΩ-trimm.	4822 100 10506
3211	1 kΩ-trimm.	4822 100 10504
3213	10 kΩ-7 W	4822 113 80213
3214	4.7 kΩ-trimm.	4822 100 10506
3221	1 kΩ-trimm.	4822 100 10504
3223	10 kΩ-7 W	4822 113 80213
3224	4.7 kΩ-trimm.	4822 100 10506
3241	1 MΩ-0.5 W	4822 116 52493
3242	1.5 kΩ-0.5 W	4822 110 53112
3243	1.5 kΩ-0.5 W	4822 110 53112
3244	1.5 kΩ-0.5 W	4822 110 53112
3245	1.5 kΩ-0.5 W	4822 110 53112
3246	1.5 kΩ-0.5 W	4822 110 53112
3249	4.7 MΩ-trimm.	4822 100 10586
3253	1.5 MΩ-0.33 W	4822 110 72192
3268	3 Ω-3.5 W	4822 113 80353

BC55
BF86

BAS1

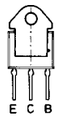
VARICUS

1250	Focus potmeter
	Focus cable long
	Focus cable short
	Socket picture tube

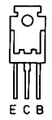
BC328-40
BC337
BC547
BC548
BC557
BC558
BF324

BF 422

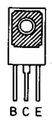
BF 240
BF 494



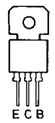
BU508
BU706
BU826



BUX 84



BD676
BD234



BD 826
BF 869

ELECTRICAL PARTS ON SMALL SIGNAL PANEL

2110	22 µF- 35 V	4822 124 40434
2164	2.2 µF- 50 V	4822 122 31942
2166	20 pF-trimm.	4822 125 50045
2176	6.8 µF- 25 V	4822 122 31941
2192	22 µF- 35 V	4822 124 40434
2204	3.9 nF-160 V	5322 121 54127
2206	10 µF- 50 V	4822 124 40435
2208	10 µF- 16 V	4822 122 31939
2209	10 µF- 50 V	4822 124 40435

BA317		4822 130 30847
BAV21		4822 130 30842

3104	18 kΩ-2.5 W	4822 116 51091
3108	12 Ω-0,33 W	4822 111 30511
3116	10 kΩ-trimm.	4822 101 10351
3153	470 Ω-trimm.	4822 100 10038
3161	8.2 Ω-0.33 W	4822 111 30506
3205	2.2 kΩ-trimm.	4822 101 10348
3212	10 kΩ-trimm.	4822 101 10351

TDA3561A		4822 209 81239
TDA3576B		4822 209 81506
HZT33		4822 130 30959

5110		4822 157 50961
5136		4822 156 20966
5137		4822 156 21113
5139	Delay line	4822 157 51056
5151		4822 156 21027
5152		4822 156 21025

VARIOUS

1151	Delay line	4822 320 40096
1166	Crystal 8.867 MHz	4822 242 70626

15 pin	Module connector	4822 267 20216
19 pin	Module connector	4822 267 60082
27pin	Module connector	4822 267 60105

ELECTRICAL PARTS ON LARGE SIGNAL PANEL

2107	100 µF- 50 V	4822 124 21348
2125	3100 µF- 30 V	4822 124 21347
2160	680 pF-2000 V	4822 122 32061
2163	9.1 nF-2000 V	4822 121 41784
2165	330 nF- 250 V	4822 121 42365
2169	390 nF- 250 V	4822 121 40479
2172	120 nF- 100 V	4822 121 42328
2177	15 µF- 350 V	4822 124 21654
2178	10 µF- 50 V	4822 124 40435
2187	3100 µF- 30 V	4822 124 21347

5107		4822 157 50963
5120		4822 157 50882
5164		4822 156 21157
5165		4822 157 52159
5166		4822 140 10269
5170		4822 158 10728
5269		4822 156 21258

3105	100 kΩ-trimm.	4822 101 10352
3107	680 Ω- 1.6 W	4822 116 51162
3111	10 kΩ-trimm.	4822 101 10351
3114	2 MΩ-0.33 W	5322 116 60135
3115	100 kΩ-trimm.	4822 101 10352
3125	680 Ω- 1.6 W	4822 116 51162
3131	1 kΩ- 1.6 W	5322 116 54909
3161	0.75 Ω- 4 W	4822 113 80323
3164	330 Ω- 2.5 W	5322 116 54395
3166	1.5 kΩ- 0.5 W	4822 110 53112
3170	2.2 kΩ-0.33 W	4822 111 30569
3174	22 kΩ-trimm.	4822 100 10051
3176	8.2 Ω- 1.6 W	4822 116 51878
3178	2.7 kΩ- 1.6 W	4822 116 51133
3179	6.8 Ω-0.33 W	4822 111 30504
3186	1.5 Ω-0.33 W	4822 111 30487

BC547		4822 130 44257
BD234		4822 130 40917
BU508V		4822 130 42558

BAS11		4822 130 41273
BY228		4822 130 41275
BYD33D		4822 130 42488
BYV27-150		4822 130 31628
BYV95B		4822 130 41486
BYW95B		4822 130 32058
BZX79/C5V6		4822 130 34173
BZX79/C6V8		4822 130 34278
BZX79/C27		4822 130 34379
BZX79/C33		4822 130 34142
OF449		4822 130 30983

TDA3650		4822 209 81121

VARIOUS

SK3		4822 273 30206
EHT-cable		4822 320 20097
Fuse holder		4822 492 60063
Insulator for BU508V		4822 466 91487
Spring for BD234		4822 492 62077
Spring for BU508V/TDA3650		4822 492 62076
1179	2 Amp. T (glass type)	4822 253 30025
1179	2 Amp. T (plastic type)	4822 253 10039

ELECTRICAL PARTS ON PICTURE TUBE PANEL

3202	10 kΩ-7 W	4822 113 80213
3204	4.7 kΩ-trimm.	4822 100 10506
3211	1 kΩ-trimm.	4822 100 10504
3213	10 kΩ-7 W	4822 113 80213
3214	4.7 kΩ-trimm.	4822 100 10506
3221	1 kΩ-trimm.	4822 100 10504
3223	10 kΩ-7 W	4822 113 80213
3224	4.7 kΩ-trimm.	4822 100 10506
3241	1 MΩ-0.5 W	4822 116 52493
3242	1.5 kΩ-0.5 W	4822 110 53112
3243	1.5 kΩ-0.5 W	4822 110 53112
3244	1.5 kΩ-0.5 W	4822 110 53112
3245	1.5 kΩ-0.5 W	4822 110 53112
3246	1.5 kΩ-0.5 W	4822 110 53112
3249	4.7 MΩ-trimm.	4822 100 10586
3253	1.5 MΩ-0.33 W	4822 110 72192
3268	3 Ω-3.5 W	4822 113 80353

BC55[illegible]		4822 130 40941
BF86[illegible]		4822 130 41773

BAS1[illegible]		4822 130 41273

VARICUS

1250	Focus potmeter	4822 101 20814
	Focus cable long	4822 320 20126
	Focus cable short	4822 320 20109
	Socket picture tube	4822 255 70216

DIAGRAM-SCHALTBILD-SCHEMA B

U24 TRD IV-90 PANEL

U80 IR TRANSMITTER
TRANSMETTORE TELECOMANDO

U34 IR RECEIVER
RICEVITORE TELECOMANDO

U33 LOCAL KEYBOARD

U22

U25

U15

U4

U32 DISPLAY PANEL

IC20 UPD8049C-163 UPD8050C-163**

INPUT CONTROL

INGRESSO REGOLAZIONE

SYSTEM CONTROL SELETTORE SISTEMA

PR. "0" LATCH

CHANNEL CONTROL CONTROLLO DI CANALI

MODE TEST

BAND SELECTION SELETTORE DI BANDA

DATA PROCESSOR

PROCESSORE DATI

POWER ON RESET RESET ALL' ACCENSIONE

VOLTAGE DETECTOR RIVELATORE DI STATO

STATUS DETECTOR RIVELATORE DI TENSIONE

TRANSMITTER IDENT TRANSMET.

A&T CLOCK

AFC CONTROL CONTROLLO CAF

MEMORY CONTROL MEMORIA DI REGOLAZIONE

D-BUS RECEIVER RICEVITORE D-BUS

DATA BUFFER DEI DATI

FREQUENCY BUFFER DI FREQUENZA

REFERENCE COUNTER CONTATORE DI RIFERMENTO

FREQUENCY COUNTER CONTATORE DI FREQUENZA

TUNING CONTROL CONTATORE DI SINTONIA

DECODER + DISPLAY DRIVER

DECODIFICATORE + PILOTA DISPLAY

ADDRESS DECODER
DECOD. INDIRIZZI

SELECTOR
DECOD. DI SELEZIONE

DATA REGISTER
REGISTRO DATI

CLOCK OSCILLATOR
OSCILLATORE DI CLOCK

MEMORY 100 × 14 BITS
MEMORIA 100 × 14 BITS

SEPARATORE I/O BUFFER

READ WRITE ERASE

RC-5 DATA

ACK

STATUS STATO

DATA

CLOCK

DLEN

DLIM

SILT

AFC-ON

AFC ON

Fup

Fdov

* OPTIONAL

** ONLY IN SETS WITH TXT

CS 79 431 X

IC20 UPD8049C-163 UPD8050C-163 **

INPUT CONTROL

INGRESSO REGOLAZIONE

SYSTEM CONTROL SELETTORE SISTEMA

PR. "0" LATCH

CHANNEL CONTROL

CONTROLLO DI CANALI

MODE TEST

BAND SELECTION

SELETTORE DI BANDA

DATA PROCESSOR

PROCESSORE DATI

G 6MHz

A&T CLOCK

POWER ON RESET

RESET ALL' ACCENSIONE

VOLTAGE DETECTOR

RIVELATORE DI STATO

STATUS DETECTOR

RIVELATORE DI TENSIONE

TRANSMITTER IDENT.

TRANSMET.

AFC CONTROL

CONTROLLO CAF

MEMORY CONTROL

MEMORIA DI REGOLAZIONE

U4

U5

U25

U15

U32 DISPLAY PANEL

U1

D-BUS RECEIVER

RECIVITORE D-BUS

DATA BUFFER DEI DATI

FREQUENCY BUFFER DI FREQUENZA

REFERENCE COUNTER CONTATORE DI RIFERMENTO

400kHz

FREQUENCY COUNTER CONTATORE DI FREQUENZA

CLOCK SWITCH COMMUTATORE DI CLOCK

:5

TUNING CONTROL CONTATORE DI SINTONIA

ANALOGUE CONTROL CONTROLLO ANALOGICO

ANALOGUE REGISTER REGISTRO ANALOGICO

IC93 SAB3034

DECODER + DISPLAY DRIVER DECODIFICATORE + PILOTA DISPLAY

ADDRESS DECODER DECOD. INDIRIZZI

SELECTOR DECOD. DI SELEZIONE

READ WRITE ERASE

MEMORY 100 x 14 BITS MEMORIA 100 x 14 BITS

DATA REGISTER REGISTRO DATI

SEPARATORE I/O BUFFER

CLOCK OSCILLATOR OSCILLATORE DI CLOCK

IC99 TL061GCP-00

RC-5 DATA

ACK

V_UHF

V_VHFb

V_VHFa

DATA

CLOCK

DLEN

DLIM

SILT

AFC ON

AFC-ON Fup Fdown

FIN

τ VCR (PROG. 0÷12V)

12V-V_UHF

12V-V_VHF b

12V-V_VHF a

AFC

V-Vari 0.5-28V

D105 CQW10

D2 CQW12

D3 CQW12

D4 CQW10

D5 CQW10

V27 AFC OFF

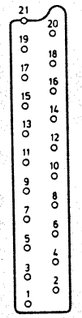
* OPTIONAL ** ONLY IN SETS WITH TXT *** NOT PRESENT IN MONO-HIFI SETS

A+C

24124F21/D

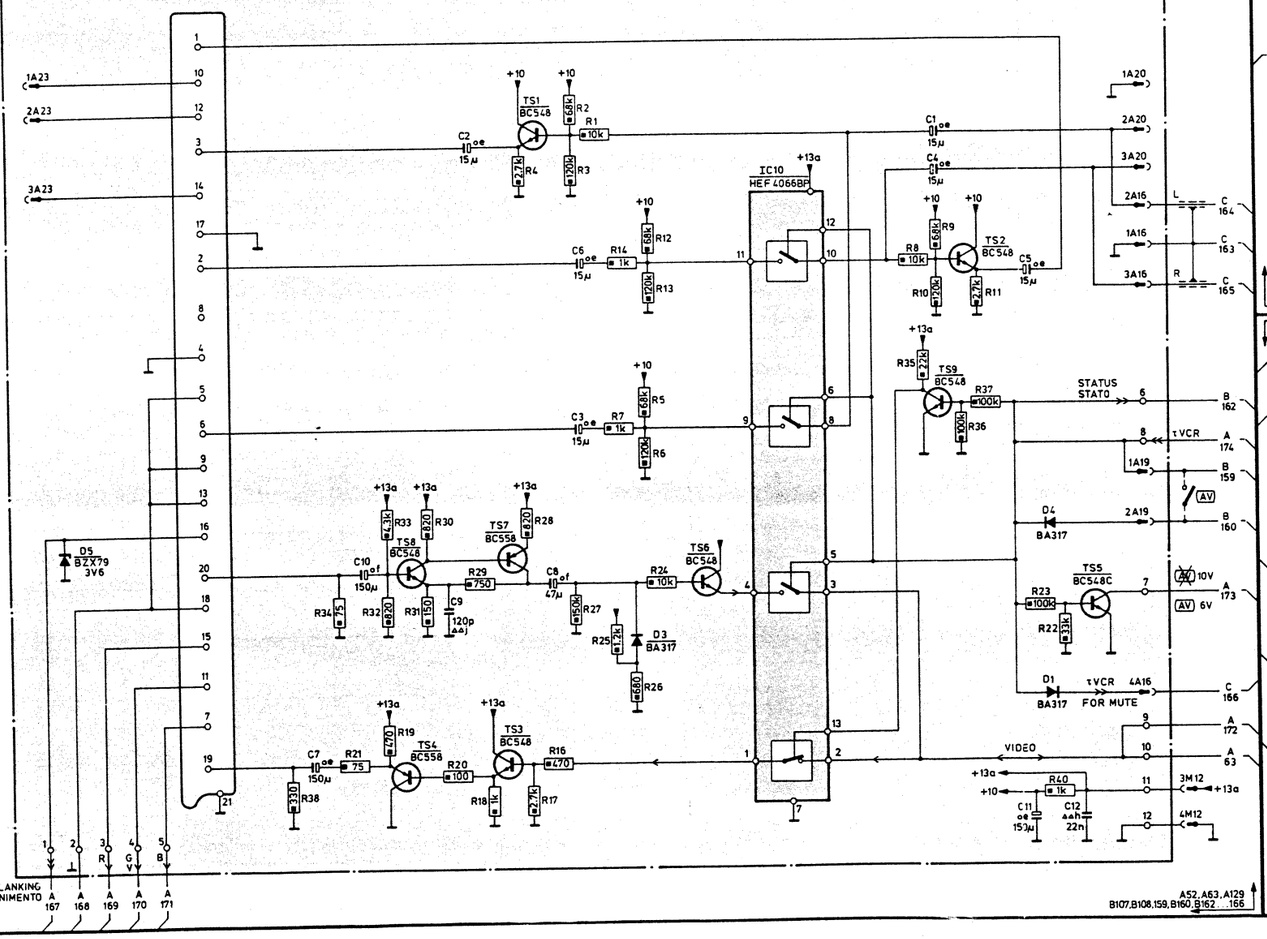
DIAGRAM – SCHALTBILD – SCHEMA C

U25 AV INTERFACE

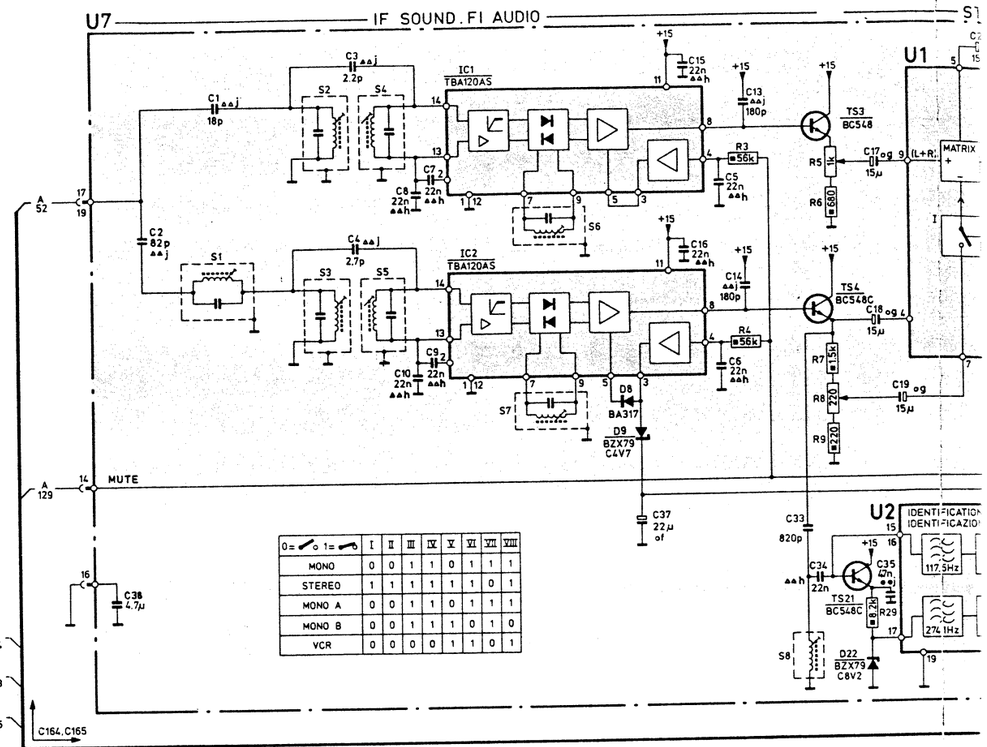


1	SOUND AUDIO	1	(0.5V RMS)
2	SOUND AUDIO	1	(0.5V RMS)
3	SOUND AUDIO	2	(0.5V RMS)
4	SOUND AUDIO	⊥	
5	B	⊥	
6	SOUND AUDIO	2	(0.5V RMS)
7	B		(0.7V RMS)
8			
9	G V	⊥	
10			
11	G V		(0.7V RMS)
12			
13	R	⊥	
14			
15	R		(0.7V RMS)
16	BLANKING SPEGNIMENTO		
17	VIDEO	⊥	
18		⊥	
19	VIDEO		(1V/75Ω)
20	VIDEO		(1V/75Ω)
21	SHIELD SCHERMATURA		

BU-3

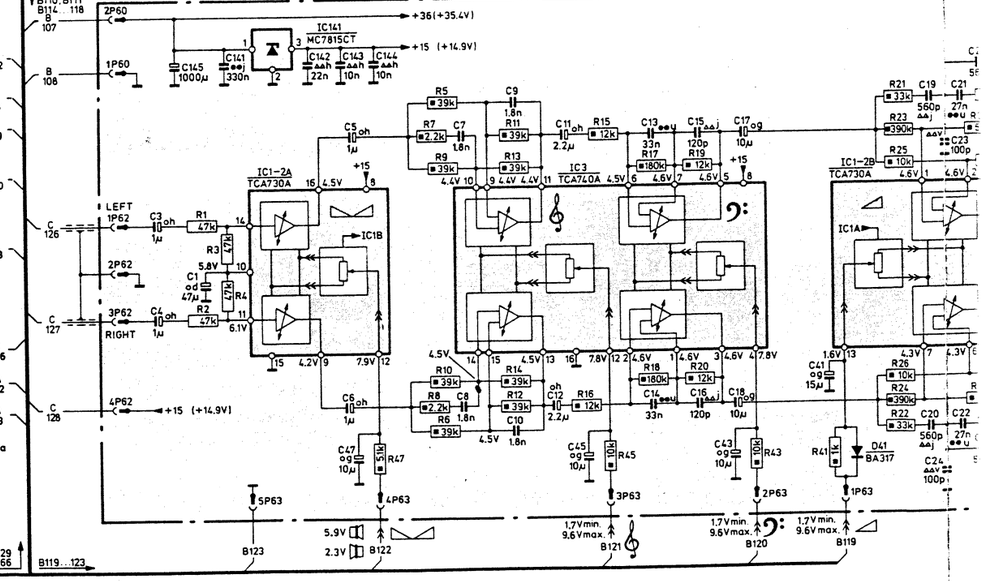


U7 IF SOUND. FI AUDIO



0= o 1=	I	II	III	IV	V	VI	VII	VIII
MONO	0	0	1	1	0	1	1	1
STEREO	1	1	1	1	1	1	0	1
MONO A	0	0	1	1	0	1	1	1
MONO B	0	0	1	1	1	0	1	0
VCR	0	0	0	0	1	1	0	1

U21 CONTROL AMPLIFIER. AMPLIFICATORE DI CONTROLLO



(0.7V RMS)

(0.7V RMS)

(1V/75Ω)

(1V/75Ω)

U7 — IF SOUND. FI AUDIO — STEREO MATRIX IDENTIFICATION. MATRICE STEREO IDENTIFICAZIONE

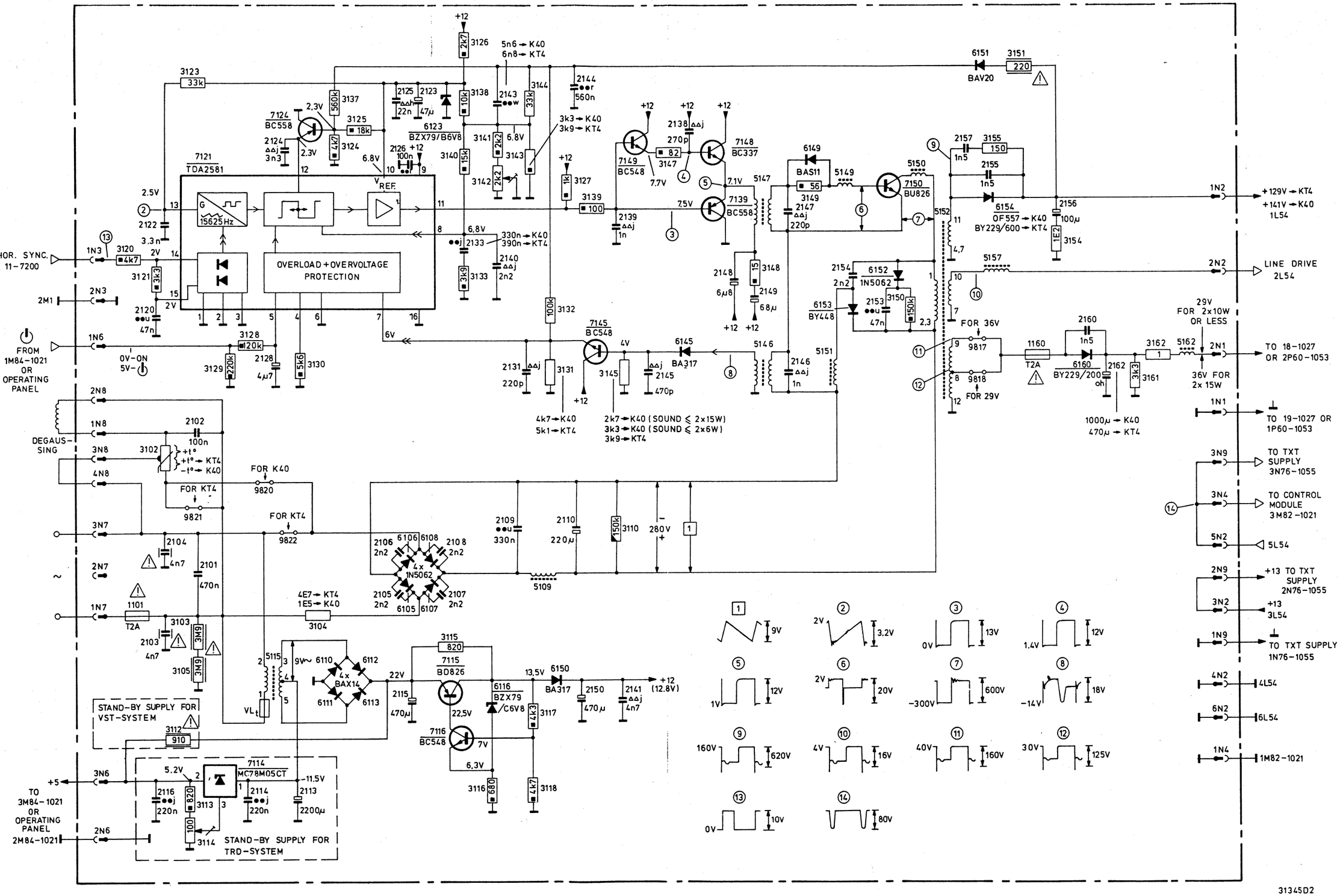
0= ○ 1= ●	I	II	III	IV	V	VI	VII	VIII
MONO	0	0	1	1	0	1	1	1
STEREO	1	1	1	1	1	1	0	1
MONO A	0	0	1	1	0	1	1	1
MONO B	0	0	1	1	1	0	1	0
VCR	0	0	0	0	1	1	0	1

U21 — CONTROL AMPLIFIER. AMPLIFICATORE DI CONTROLLO — OUTPUT AMPLIFIER. AMPLIFICATORE DI USCITA

U41 HEADPHONE PANEL

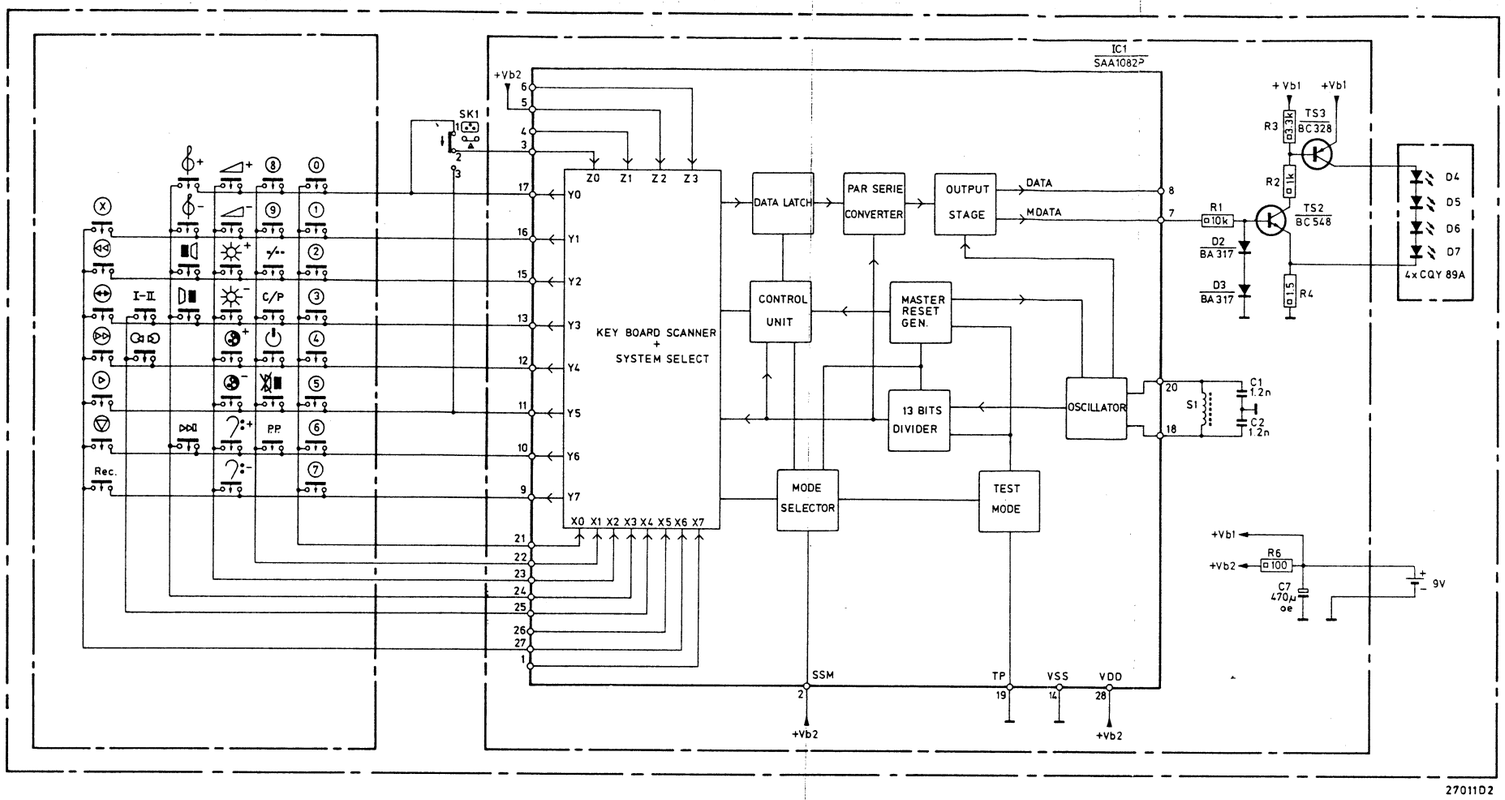
24 199F 12/D

1001 SUPPLY PANEL MAINS ISOLATED VERSION

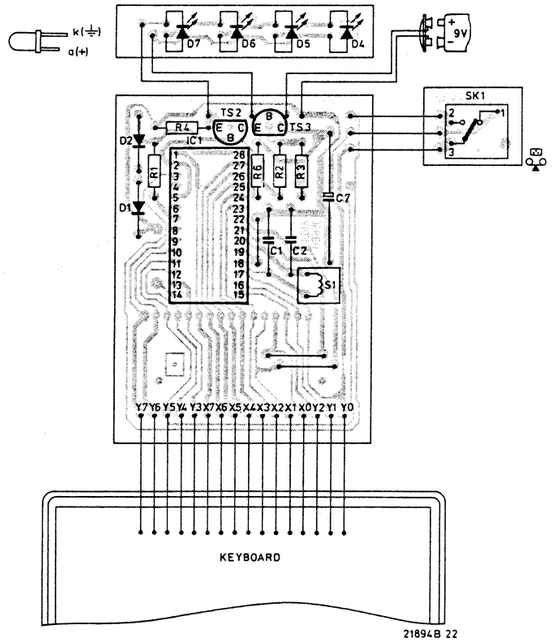


31345D2

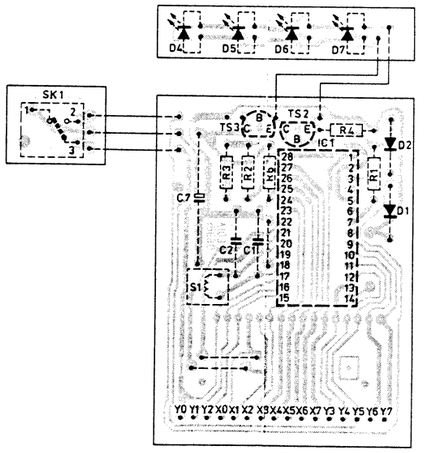
INFRA RED REMOTE CONTROL RC5241



27011D2

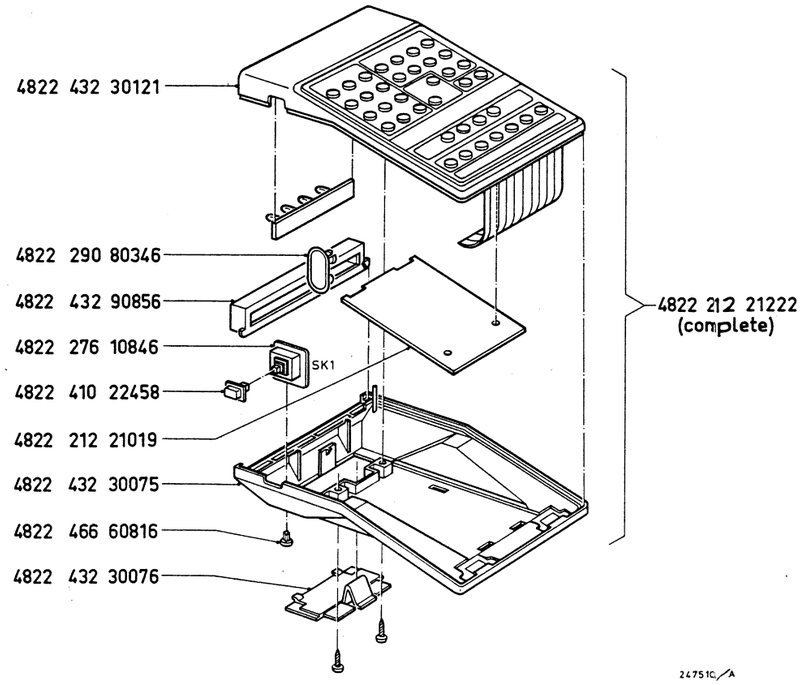


21894B 22



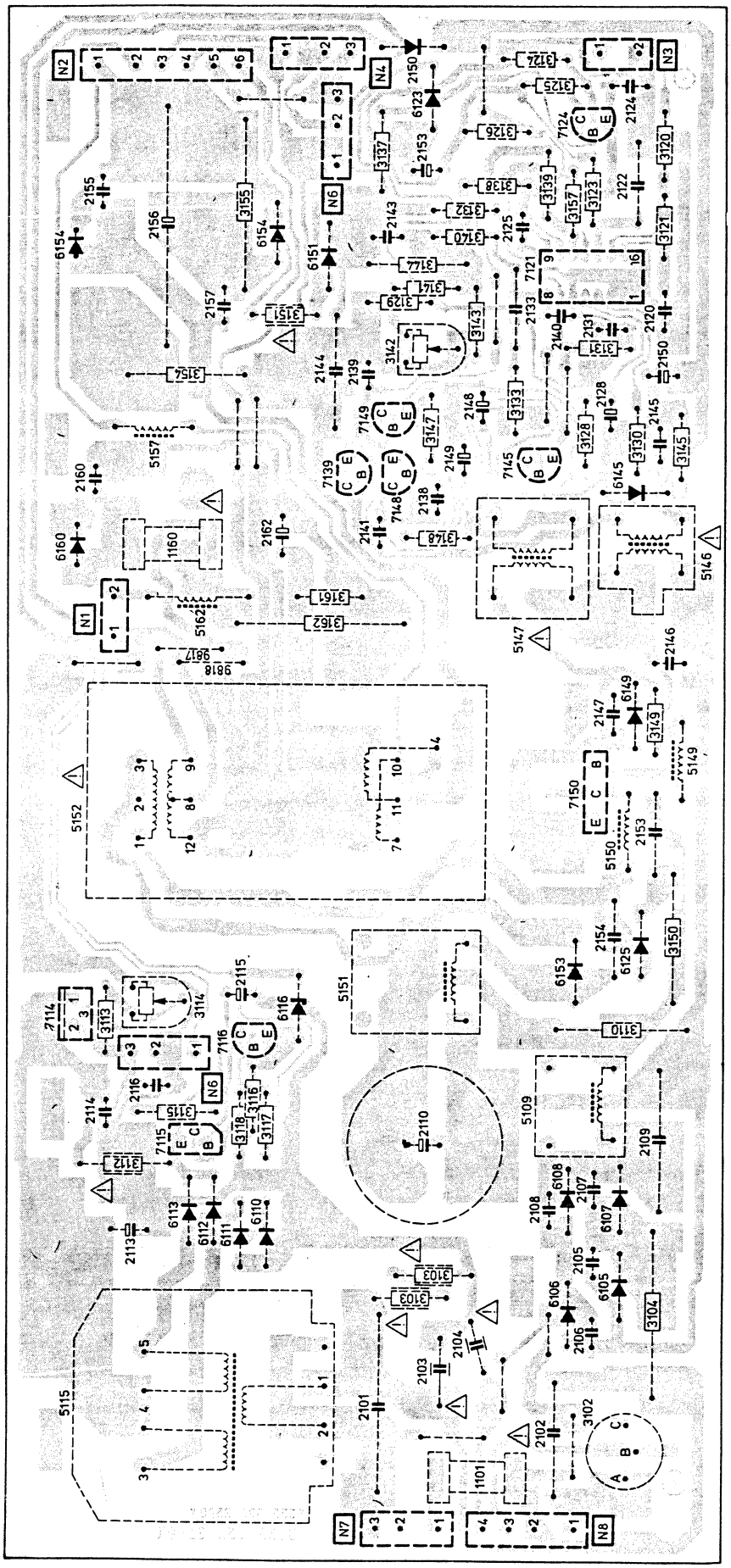
21895B 22

IC1	SAA1082P	4822 209 80613
BC328		4822 130 44104
BC548		4822 130 40938
BA317		4822 130 30847
CQY89A		4822 130 30949
C1	1.2 nF	4822 121 50439
C2	1.2 nF	4822 121 50439
S1		4822 156 20873



24751C/A

CS 77 960



32 036 D12

1001 SUPPLY PANEL MAINS ISOLATED VERSION